

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[NV-039-0053; FRL- -]

Approval and Promulgation of State Implementation Plans;

State of Nevada; Clark County

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing to approve state implementation plan (SIP) revisions submitted by the State of Nevada to provide for attainment of the carbon monoxide (CO) national ambient air quality standards (NAAQS) in the Clark County Nonattainment Area. EPA is proposing to approve the SIP revisions under provisions of the Clean Air Act (CAA or the Act) regarding EPA action on SIP submittals, SIPs for national primary and secondary ambient air quality standards, and plan requirements for nonattainment areas. **DATES:** Written comments on this proposal must be received by [insert date 30 days after the publication date].

ADDRESSES: Comments should be addressed to the EPA contact below. You may inspect and copy the rulemaking docket for this notice at the following location during normal business

hours. We may charge you a reasonable fee for copying parts of the docket.

Steven Barhite, Chief
Environmental Protection Agency, Region 9
Air Division, Air Planning Office (AIR-2)
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Copies of the SIP materials are also available for inspection at the addresses listed below:

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Division of Environmental Protection
333 West Nye Lane, Room 138
Carson City, NV 89706

Clark County Department of Air Quality Management
500 S. Grand Central Parkway
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FOR FURTHER INFORMATION CONTACT:

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SUPPLEMENTARY INFORMATION: Throughout this document, "we," "us" and "our" refer to EPA.

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I. Background

A. Why is CO an air quality problem?

Carbon monoxide (CO) is a colorless, odorless gas emitted in combustion processes. In Clark County, like most urban areas, CO comes primarily from tailpipe emissions of cars and trucks.¹ Exposure to elevated CO levels is associated with impairment of visual perception, work capacity, manual dexterity, and learning ability, and with illness and death for those who already suffer from cardiovascular disease, particularly angina or peripheral vascular disease.

B. How are CO levels assessed?

Under section 109 of the Act, we have established primary, health-related NAAQS for CO: 9 parts per million (ppm) averaged over an 8-hour period, and 35 ppm averaged over 1 hour. Attainment of the 8-hour CO NAAQS is achieved if not more than one non-overlapping 8-hour average per monitoring site per year exceeds 9 ppm in any consecutive 2-year period

¹ In the 1996 base year inventory, on-road vehicles accounted for approximately 86 percent of CO emissions while nonroad sources contributed roughly 11 percent and stationary and area sources contributed roughly 3 percent.

(values below 9.5 are rounded down to 9.0 and are not considered exceedances).

Clark County has never exceeded the 1-hour NAAQS. For this reason, the Clark County CO plan and this action address only the 8-hour NAAQS. The area has been monitoring ambient air for CO levels since the early 1980's. In 1985, the Las Vegas area recorded 41 exceedances of the 8-hour NAAQS; however, the area has recorded less than 5 exceedances each year since the early 1990's. Most of the CO exceedances in Clark County occur during the months of January, February, and December, with peak concentrations typically in the evenings. The last exceedances of the eight-hour CO NAAQS were recorded in 1998 at the Sunrise Avenue site in Las Vegas, and while the ambient monitoring data provides a preliminary basis for EPA to propose an attainment finding for Las Vegas Valley, this notice does not address that issue. EPA will publish an attainment finding for Las Vegas Valley in a separate notice, if appropriate following a detailed review of the monitoring data.

C. What Clean Air Act statutory, regulatory and policy requirements must Las Vegas meet to improve CO levels?

Las Vegas Valley was first designated as a CO nonattainment area in 1978. See 43 FR 8962, 9012 (March 3,

1978). The CAA Amendments of 1977 required states to prepare plans to achieve the NAAQS in nonattainment areas. The original attainment deadline was 1982. EPA conditionally approved the initial CO plan for Las Vegas Valley into the Nevada SIP in 1981. See 46 FR 21758 (April 14, 1981). EPA removed the conditions on the CO plan in 1982. See 47 FR 15790 (April 13, 1982.) Updated plans were required for nonattainment areas, like Las Vegas Valley, that did not achieve the original 1982 deadline. EPA approved this updated plan into the Nevada SIP in 1984. See 49 FR 44208 (November 5, 1984) and 40 CFR 52.1470(c)(32).

The Federal CAA was substantially amended in 1990 to establish new planning requirements and attainment deadlines for the NAAQS. Under section 107(d)(1)(C) of the Act, areas designated nonattainment prior to enactment of the 1990 amendments, including Las Vegas Valley, were designated nonattainment by operation of law.² Under section 186(a) of the Act, each CO area designated nonattainment under section 107(d) was also classified by operation of law as either moderate or serious, depending on the severity of the area's air quality problem. CO areas with design values between 9.1

² The CO nonattainment area is the "Las Vegas Valley Hydrographic Area 212" within Clark County. See 40 CFR 81.329.

and 16.4 parts per million (ppm), such as the Las Vegas Valley area, were classified as moderate. (The design value for Las Vegas Valley for initial classification purposes was 14.4 ppm, which was based on monitoring data from the late 1980's.) These nonattainment designations and classifications were codified into 40 CFR part 81. See 56 FR 56694 (November 6, 1991). Section 172 of the Act contains general requirements applicable to SIP revisions for nonattainment areas, and sections 186 and 187 of the Act set out additional air quality planning requirements for CO nonattainment areas.

The most fundamental of these provisions is the requirement that CO nonattainment areas with design values greater than 12.7 ppm submit a SIP revision demonstrating attainment of the NAAQS as expeditiously as practicable but no later than the deadline applicable to the area's classification: December 31, 1995, for moderate areas. See CAA sections 186(a)(1) and 187(a)(7). Such a demonstration must provide enforceable measures to achieve emission reductions each year leading to emissions at or below the level predicted to result in attainment of the NAAQS throughout the nonattainment area.

Las Vegas Valley failed to reach attainment by December 31, 1995, but, under section 186(a)(4) of the Act, the State

of Nevada requested, and EPA granted, a one-year extension of the attainment date to December 31, 1996. See 61 FR 57331 (November 6, 1996). However, in the first quarter of 1996, Clark County recorded three exceedances of the CO standard at the East Charleston monitoring station and thus was unable to show attainment of the standard by the new attainment date and could not qualify for an additional one-year extension under section 186(a)(4) of the Act.

Subsequently, on October 2, 1997, we published a final rule that found that the Las Vegas Valley CO nonattainment area did not attain the CO NAAQS by the applicable attainment date and that reclassified the area from "moderate" to "serious" nonattainment under section 186(b)(2) of the Act.³ See 62 FR 51604 (October 2, 1997). Areas reclassified as serious are given more time to develop a SIP revision and a new attainment date but are subject to additional requirements beyond those that are required in moderate nonattainment areas. For Las Vegas Valley, the effect of the reclassification to "serious" was to allow Nevada 18 months from the effective date of the reclassification to submit a

³ Title 40 of the Code of Federal Regulations, Part 81, Section 81.329 (40 CFR 81.329) was not updated at that time to reflect this final action but was recently updated in a separate action. See 67 FR 12474 (March 19, 2002).

new SIP demonstrating attainment of the CO NAAQS as expeditiously as practicable but no later than December 31, 2000, the CAA attainment date for serious CO nonattainment areas.

We have issued a "General Preamble" describing the agency's preliminary views on SIP revisions submitted under Title I of the Act. See generally 57 FR 13498 (April 16, 1992) and 57 FR 18070 (April 28, 1992). The reader should refer to the General Preamble for a more detailed discussion of our preliminary interpretations of Title I requirements. In this proposed rulemaking action, we are applying these interpretations to the Las Vegas Valley CO SIP submittals, taking into consideration the specific factual issues presented.

D. Has EPA acted on prior and related Las Vegas Valley CO SIP revisions?

Under a letter dated November 13, 1992, the Nevada Division of Environmental Protection ("NDEP") submitted the first CO attainment plan for Las Vegas Valley ("1992 CO plan") under the Clean Air Act Amendments of 1990. Because the 1992 CO plan was superceded by the 1995 CO plan, discussed below, we will be taking no action on that plan.

From 1992 through 1994, the State of Nevada submitted various required CO SIP elements to us for Las Vegas Valley, and, in 1995, the State of Nevada submitted a new CO attainment plan for Las Vegas Valley under a letter from NDEP dated November 8, 1995 ("1995 CO plan"). The 1995 CO plan was adopted by the Clark County Board of Commissioners on October 17, 1995. The 1995 CO plan was deemed complete by operation of law on May 13, 1996 under section 110(k)(1)(B) of the Act. The 1995 CO plan included emissions inventories, including motor vehicle emissions estimates referred to as budgets, and several CO control measures, including a specification for Reid Vapor Pressure (RVP) of wintertime gasoline sold in Clark County, a wintertime oxygenated fuels program, contingency measures related to technician training for the vehicle inspection and maintenance ("I/M") program and heavy duty vehicle inspection, and an additional commitment to implement an expanded remote vehicle sensing program.

Until today's notice, the only portion of the 1995 CO plan that was acted upon by us was the motor vehicle emission budgets. We were required to make positive or negative adequacy determinations on all emission budgets in response to the March 2, 1999 court decision in *Environmental Defense Fund v. EPA*, 167 F.3d 641 (D.C. Cir. 1999). We acted on the motor

vehicle emission budgets contained in the 1995 CO plan on May 5, 1999. See 64 FR 31217 (June 10, 1999). We found the conformity emission budget (298.6 tons per day, or tpd) in the 1995 CO plan inadequate since the area failed to meet attainment by the required date for moderate nonattainment areas and was subsequently reclassified to "serious".

In today's action, we are proposing to approve several control measures derived from those cited in the 1995 CO plan, including the State's wintertime RVP regulation for gasoline sold in Clark County, into the Nevada SIP. In addition, we are proposing to approve Nevada's vehicle I/M program, which now includes training and certification requirements for vehicle I/M repair technicians and which now requires annual inspection of heavy-duty gasoline-powered vehicles.

One of the individual SIP elements submitted in the 1992 to 1994 timeframe referred to above was the vehicle I/M program. Under a letter dated July 28, 1994, NDEP submitted a SIP revision related to the State's vehicle I/M program, and we determined that submittal to be complete on January 31, 1995. In the wake of changes to our requirements for such programs, NDEP submitted another SIP revision related to the vehicle I/M program under a letter dated March 20, 1996. This 1996 vehicle I/M submittal superceded the 1994 vehicle I/M

submittal and was deemed complete by operation of law on September 20, 1996. Subsequent revisions of the I/M regulations were submitted in August 2000 as part of the 2000 CO plan, described below, and in 2002, the State submitted additional adopted revisions to the I/M regulations, a draft revision to the I/M provisions related to inspection of model year 1996 and newer vehicles, and supplemental materials related to vehicle roadside remote sensing (on-road testing). In today's action, we are proposing to approve the 1996 vehicle I/M program submittal as revised to reflect the changes in that program through 2002.

As noted above, the "serious area" CO SIP revision was due 18 months from the effective date (i.e., November 3, 1997) of reclassification to "serious," or May 3, 1999. By that date, Nevada had not submitted the required SIP revision, and on September 10, 1999, we published a Federal Register notice finalizing a finding of failure to submit a "serious area" SIP revision for CO. See 64 FR 49084 (September 10, 1999). This finding, which was effective on August 31, 1999, triggered an 18-month time clock for sanctions and a 2-year time clock for a federal implementation plan (FIP) under the Act.

Subsequently, under a letter dated September 29, 1999, NDEP submitted the "Carbon Monoxide Air Quality Implementation

Plan - September 1999." This plan, referred to herein as the 1999 CO plan, was adopted by the Clark County Board of Commissioners on September 21, 1999 and was developed to respond to the CO serious area requirements. On January 12, 2000, we sent a letter to John Schlegel, Director of the Clark County Department of Comprehensive Planning (CCDCP), summarizing problems with the plan and stating the we had made an inadequacy finding on the emission budgets in the plan, and in February of 2000, we published an inadequacy notice on conformity budgets contained in the 1999 CO plan. See 65 FR 4965 (February 2, 2000). The budgets in that CO plan were found inadequate because we determined that the measures contained in the 1999 CO plan would not be sufficient to reach attainment. Since the 1999 CO plan was superceded by the 2000 CO plan discussed below, we will be taking no action on that plan.

Under a letter dated August 9, 2000, NDEP submitted the 2000 CO plan for Las Vegas Valley, adopted by the Clark County Board of Commissioners on August 1, 2000 (referred to herein as the 2000 CO plan). We determined this submittal to be complete on September 12, 2000, with respect to portions of

the plan relating to CO SIP requirements.⁴ On November 20, 2000, we also found that the motor vehicle emission budgets in the 2000 CO plan were adequate for transportation purposes.

In June 2001, the Governor of Nevada designated the Clark County Board of Commissioners as the regulatory, enforcement and permitting authority for implementing the Federal Clean Air Act within Clark County. This action by the Governor necessitated a transfer of certain pre-existing authorities from the Clark County Board of Health to the County Board of Commissioners. In response to the Governor's designation, the Clark County Board of Commissioners created the Clark County Air Quality Management Board (CCAQMB) as the governing agency for air quality programs and regulations in Clark County. CCAQMB acts through a new County department, referred to as the Clark County Department of Air Quality Management (CCDAQM), which has assumed the responsibilities for air quality enforcement functions that had been performed by the Clark County Health District as well as for air quality planning functions previously performed by CCDCP.

⁴ EPA adopted the completeness criteria on February 16, 1990 (55 FR 5830) and, pursuant to section 110(k)(1)(A) of the Act, revised the criteria on August 26, 1991 (56 FR 42216).

Lastly, under letters dated January 30, 2002 and June 4, 2002, NDEP submitted additional information to supplement the 2000 CO plan, including, among other items, current versions of certain adopted I/M and fuel regulations, a draft version of revised I/M regulations and a request that EPA "parallel process"⁵ these draft regulations as part of our proposed action on the 2000 CO plan, and the current statutory authority for the I/M program in Las Vegas Valley. In today's action, we are proposing to approve the plan elements and measures contained in this 2000 CO plan as supplemented by the materials submitted by NDEP in January and June 2002.

E. What is included in the 2000 Las Vegas Valley CO plan?

This 2000 CO plan provides, among other things, a revised CO attainment demonstration based on updated vehicle miles traveled (VMT) projections reflecting new forecasts prepared by the Clark County Regional Transportation Commission (RTC),

⁵ Under the "parallel processing" procedure, EPA proposes rulemaking action concurrently with the state's procedures for approving a SIP submittal and amending its regulations (40 CFR part 51, appendix V, 2.3). If a state's proposed revision is substantially changed in areas other than those identified in this document, EPA will evaluate those changes and may publish another notice of proposed rulemaking. If no substantial changes are made, EPA will publish a final rulemaking on the revisions after responding to any submitted comments. Final rulemaking action by EPA will occur only after the SIP revision has been fully adopted by the state and submitted formally to EPA for incorporation into the SIP.

revised motor vehicle emission modeling, new emissions inventories, amended control measures, and updated areawide Urban Airshed Modeling (UAM) and hotspot (CAL3QHC) air quality modeling analyses using the updated inventories and improvements to other modeling inputs.

II. EPA Action

A. What is EPA proposing to approve?

In this document, we are proposing to approve the 2000 CO plan, with respect to the CAA requirements for notice and adoption, baseline and projected emissions inventory, the reasonable further progress (RFP) demonstration, the attainment demonstration, and VMT forecasts. In addition, we are proposing to approve Nevada's low enhanced I/M program for Clark County under section 187(a)(6) of the Act, Clark County's wintertime Cleaner Burning Gasoline program under section 211(c)(4)(C) of the Act, and Nevada's wintertime gasoline specification for Clark County related to Reid Vapor Pressure (RVP). These three programs, along with previously-approved oxygenated fuel regulations and natural vehicle turnover (replacement of older higher-emitting vehicles with newer models manufactured to meet increasingly stringent emissions standards), are the main control programs relied upon to reach attainment. We are also proposing to approve an

alternative fuel program for government vehicles, voluntary transportation control measures, a determination that stationary sources do not contribute significantly to CO levels for the purposes of section 187(c) of the Act, a contingency measure, commitments for further submittals and control measures, as needed, and CO emissions budgets for conformity purposes.

B. Does the 2000 CO plan meet all the procedural requirements?

As noted in our earlier completeness finding for the 2000 CO plan (letter dated September 12, 2000 from Amy Zimpfer to Allen Biaggi), the CCDCP has satisfied applicable statutory and regulatory requirements for reasonable public notice and hearing prior to adoption of the plan and each of the plan amendments. The CCDCP conducted numerous public workshops and public hearings prior to the adoption hearing on August 1, 2000, at which the 2000 CO plan was adopted by the Clark County Board of County Commissioners, the lead agency for local air quality planning in the Las Vegas Valley area. The SIP submittal⁶ includes a description of public meetings and hearings where the public had the opportunity to comment on the issues addressed in the plan. Public noticing for these

⁶ A summary of public participation activities in the development of the plan are included in Appendix D, section 11 of the 2000 CO plan.

meetings occurred through advertisements in the Las Vegas Review Journal and the Las Vegas Sun as well as on the Internet. Also included are the comments received from the public and responses developed by the CCDCP staff. Therefore, we propose to approve the 2000 CO plan as meeting the procedural requirements of section 110(a)(2) of the Act.

C. What levels of CO are estimated for the base year and projected for future years and does the plan provide for reasonable further progress?

The revised and updated emissions inventory included in the 2000 CO plan is consistent with our guidance documents.⁷ The motor vehicle emissions factors used in the plan were generated by the EPA MOBILE5 model. The base-year (1996) inventory was developed using MOBILE5a (as adjusted to account for off-cycle emissions); MOBILE5b was used for emissions projections for years 2000, 2010, and 2020 (also adjusted to account for off-cycle emissions). The gridded CO inventory for motor vehicles was then produced using the Direct Travel

⁷ See, for example, Emission Inventory Requirements for Carbon Monoxide State Implementation Plans, EPA--450/4-91-011; Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone, Volume I: General Guidance for Stationary Sources EPA--450/4-91-016; Procedures for Emission Inventory Preparation, Volume IV: Mobile Sources, EPA 450/4-91-026d Revised.

Impact Model version 2.0 (DTIM2), distributed by the California Department of Transportation, which combines motor vehicle emission factors with transportation modeling performed by RTC.

The point source inventory was prepared primarily from a mail survey by the Clark County Health District (CCHD). Survey results were supplemented by information obtained through personal contacts during compliance inspections. VMT data necessary to calculate on-road mobile source emissions was provided by RTC. Table 1 below contains demographic information for Clark County.

Table 1 - Demographic Data Used in Developing Emission Inventories and to Project Activity Levels for Nonattainment Area⁸

Year	Population	Employment	VMT
1996	1,037,844	493,213	22,469,020
2000	1,269,600	609,400	24,929,485
2010	1,790,700	859,500	38,022,330
2020	2,406,500	1,115,100	57,492,333

Base Year Emissions

The results of the Las Vegas Valley 1996 base year CO emissions inventory for stationary point and area sources, on-

⁸Data is based on Clark County Regional Transportation Commission (RTC) 1997 Estimates / Projections.

road mobile sources, and nonroad mobile sources categories are tabulated in this section. The biogenics category has been omitted, as it is not applicable to CO emissions. Table 2 below contains a detailed listing of average daily, CO season emissions by source category. Large stationary sources at the periphery of the nonattainment area (State hydrographic area No. 212) have also been included in the inventory.

Table 2 - 1996 CO Emissions - Average Daily CO Season

Source Categories	Emissions (Tons/Day)	Emissions (Percent)
Stationary Point Sources		
Titanium Metals	2.84	0.60%
Kerr McGee-BMI	0.24	0.05%
Chemical Lime Co. Apex	0.82	0.17%
Bonanza Materials	0.28	0.06%
James Hardie Gypsum	0.55	0.12%
Southern Nevada Paving	0.55	0.12%
Pabco Cogeneration/NCA 2	0.55	0.12%
Georgia Pacific@Apex/NCA 1	0.62	0.13%

Point Source Total	6.45	1.36%
Area Sources		
Small Stationary	2.70	0.57%
Boiler Emissions	1.24	0.26%
Fireplaces	2.12	0.45%
Structural Fires	0.87	0.18%
Vehicular Fires	0.07	0.01%
Brush Fires	1.68	0.36%
Residential Natural Gas	0.78	0.16%
Commercial Natural Gas	0.17	0.04%
Industrial Natural Gas	0.36	0.08%
Electrical Utility Generation	0.56	0.12%
Cigarette Smoking	0.05	0.01%

Area Source Total	10.59	2.24%

Nonroad Mobile Sources

County Airports	36.4	7.69%
Nellis AFB	2.86	0.60%
Locomotive Emissions	0.23	0.05%
Lawn and Garden Equipment	0.86	0.18%
Construction Equipment	7.84	1.66%
MC & Recreational Equipment	2.93	0.62%

Total Nonroad Sources	51.12	10.79%
On-road Mobile Sources	405.40	85.61%

TOTAL DAILY EMISSIONS	473.56	100.0%

Total average daily, CO season emissions associated with the Las Vegas Valley nonattainment area for the 1996 base year are 473.56 tons per day. The methodologies used to prepare the base year emissions inventory, as described in chapter 3 and appendix A of the 2000 CO plan, are acceptable. Accordingly, we propose to approve the 2000 CO plan with respect to the base year emissions inventory requirements of sections 172(c)(3) and 187(a)(1) of the Act.

Future Year Emissions

The plan must estimate future year emission levels to determine if Las Vegas Valley can reduce CO levels to acceptable levels. Emission estimates for the year 2000 are projected using growth factors from the Bureau of Economic

Analysis (for stationary, area and nonroad sources) and using projected population, employment and VMT data from RTC (for on-road sources). Levels are estimated both with and without the impact of the new control programs included in the 200 CO plan. A summary of these emission estimates is given in Table 3.

Table 3 - CO Emissions by Major Source Category - Average Daily Emissions, CO Season, Year 2000

Source Category	Emissions (tons/day)	
	Uncontrolled	Controlled
Stationary Sources.....	6.45	6.45
Area Sources.....	12.41	12.41
On-road Vehicles.....	353.23	310.18
Other Mobile.....	53.45	53.45

Total	425.44	382.40

The decline in emissions from uncontrolled to controlled shown in Table 3, above, is attributed to the wintertime Cleaner Burning Gasoline regulation, on-road vehicle fleet turnover, the technician training and certification requirements of the State's vehicle I/M program, an alternative fuels program for government fleets and voluntary transportation control measures. Also, as described in the following section, the CO emissions reductions under the 2000 CO plan are sufficient to demonstrate attainment by the

applicable date. Thus, the 2000 CO plan includes a control strategy that has been implemented to produce annual incremental reductions of emissions and that has thereby provided for RFP toward attainment of the standard by the applicable attainment date (December 31, 2000).

In this action, therefore, we propose to approve the projected emissions inventories, under sections 172(c)(3) and 187(a)(1) of the Act, and approve the 2000 CO plan with respect to the RFP requirements in sections 172(c)(2) and 187(a)(7) of the Act.

D. How does the CO plan show attainment of the CO standards?

The attainment demonstration includes both an areawide and a hot-spot modeling analysis at heavily-traveled intersections. The areawide analysis was conducted using the Urban Airshed Model (UAM), according to our "Guidance for Application of Urban Areawide Models for CO Attainment Demonstrations" (1992). The UAM analysis uses a December 8-9, 1996 episode. This episode predicted an 8-hour concentration of 11.2 ppm after all adjustments were incorporated. In addition to high 8-hour values on this day, the highest one-hour value (11.8 ppm) was also recorded on this episode day.

Emissions inventory data used in the base year (1996) UAM analysis were derived from the data shown in Table 2, above.

The emissions inventory data used for the UAM analysis were disaggregated into 5 kilometer grid cells throughout the modeling domain. On-road emissions were distributed using the 1996 roadway network and emission factors. Model performance for the base year UAM simulation is within our acceptable range of accuracy: +17 percent for the unpaired peak prediction, 0 percent for the paired peak prediction, and 3 hours for the timing error. See 2000 CO plan, page 5-5.

For the attainment year (2000) and for additional future years, on-road emissions were distributed using the Direct Travel Impact Model (DTIM) with latest projected roadway networks including future transportation projects from RTC. Thus, projected changes in Vehicle Miles Traveled (VMT), speed and vehicle occupancy rates were incorporated into the modeling.

Table 4 - UAM Results for Controlled and Uncontrolled Scenarios

Year	Concentrations [ppm]	
	Uncontrolled Scenario	Controlled Scenario
1996.....	11.2	11.2
2000.....	9.1	8.1
2010	8.7	7.2
2020	10.5	8.5

Source: 2000 CO plan, Table 6-3.

The table shows the results of the UAM analysis for the 8-hour average (the corresponding NAAQS is 9 ppm). Concentrations for the 8-hour average are shown for the maximum concentration predicted over the modeling domain. The predicted regional maximum 8-hour average CO concentration is 8.1 ppm in the year 2000, assuming implementation of all new control measures. The UAM analysis thus shows attainment with a margin of safety based on fully adopted regulations. However, an additional model, CAL3QHC must be used to determine the maximum CO levels in the area. CAL3QHC is needed to predict the micro-scale impacts of vehicles operating at congested intersections. Vehicles operating within congested conditions spend more time in idle modes that can contribute to high levels of CO near the roadways.

Microscale modeling was conducted for three intersections within Las Vegas Valley; (1) Charleston Blvd./Eastern Avenue, (2) Charleston Blvd./Fremont Street and (3) Eastern Avenue/Fremont Street. These three intersections comprise the "5 points" area which is near the Sunrise Acres CO monitoring station. For years 2000, 2010, and 2020, traffic data from the roadways were combined with emission factors from MOBILE5b and meteorological data to predict local hotspot concentrations. These hourly results from the microscale

model were then combined with hourly concentrations from the background UAM grid cell to compute maximum running 8-hour concentrations. The combined results of the CAL3QHC and UAM results are shown in Table 5 below.

Table 5 - Intersection Maximum Predicted Combined 8-hour CO Levels (ppm)

Intersection	2000	2010	2020
Charleston/Eastern	8.3	7.3	7.6
Charleston/Fremont	6.7	5.9	6.4
Eastern/Fremont	7.6	6.6	7.4

Source: 2000 CO plan, Table 6-4.

In addition to roadway intersections, high microscale CO levels can occur at airports. To model the impact of airport sources, the Emissions and Dispersion Modeling System (EDMS) model was used. This model was developed for evaluating the specific emission sources typically located at airports. As with CAL3QHC, the hotspot results from EDMS must be combined with the results of the UAM analysis to predict the concentrations at receptors around the airports. The 2000 CO plan presents results of the combined UAM and EDMS models for the base case (uncontrolled). Even without controls, no values above the 9.0 ppm standard are shown for the attainment year (2000). The peak combined concentration at McCarran

International Airport for future years is 9.07 ppm for 2020. However, with the addition of just one of the controls included in the plan (specifically, Cleaner Burning Gasoline), the predicted concentration is reduced to 7.67 ppm, well below the 8-hour standard. Therefore, we propose to grant approval to the 2000 CO plan with respect to the attainment demonstration requirement of section 187(a)(7) of the Act.

E. How are motor vehicle emissions reduced in Las Vegas Valley?

Motor vehicle emissions in Las Vegas Valley are reduced primarily by a combination of natural fleet turnover, which effectively replaces older higher-emitting vehicles with models manufactured to meet more stringent exhaust emissions standards established under the federal motor vehicle control program, a vehicle I/M program for in-use vehicles, and wintertime specifications for gasoline. Other measures that contribute to lower CO emissions include an alternative fuel program for government vehicles and voluntary transportation control measures. This section addresses the vehicle I/M program, and following sections address wintertime gasoline specifications and the other control measures.

Summary of the Nevada I/M Program

The State of Nevada has implemented an I/M program for

vehicle emissions in Las Vegas Valley since 1978. In 1981, we approved the statutory basis for the vehicle I/M program for Las Vegas Valley. See 46 FR 21758 (April 14, 1981) and 40 CFR 52.1470(14)(iv) and (16)(vi). In 1984, we approved the regulatory basis for that program into the Nevada SIP. See 49 FR 44208 (November 5, 1984) and 40 CFR 52.1470(c)(26)(iii). Because Las Vegas Valley was designated as a moderate CO nonattainment area with a design value greater than 12.7 ppm under the 1990 CAA Amendments, the State of Nevada was required under section 187(a)(6) of the Act, as amended in 1990, to revise the vehicle I/M program within Las Vegas Valley to meet "enhanced" performance standards, referred to as an enhanced vehicle I/M program.

On November 5, 1992, we published rules in the Federal Register related to plans for vehicle I/M programs (see 57 FR 52950). The Act was prescriptive regarding the various elements that are required as part of an enhanced I/M performance standard. It also required that we provide states with flexibility in meeting the requirement for enhanced or basic I/M programs. Title 40, Part 51, Section 51.351(g) *Alternate Low Enhanced I/M Performance Standard* in the Code of Federal Regulations (40 CFR 51.351(g)) allows states that meet certain specific criteria to select the alternate "low"

enhanced I/M performance standard instead of the "high" enhanced performance standards. We established an alternate low enhanced I/M performance standard for those areas that are required to implement enhanced I/M but do not have a major mobile source component to the air quality problem **or** can obtain adequate emission reductions from other sources to demonstrate RFP and attainment.

The State of Nevada chose to adopt a low enhanced vehicle I/M program and submitted this program to us as a SIP revision on March 20, 1996. The 1996 SIP Submittal for Nevada's vehicle I/M program supercedes and builds upon the "basic" program that we approved in 1984.

The 1996 SIP Submittal contained an overview of the State's I/M program, a checklist/review of the plan relating it to our requirements, legislation, rules, implementation of the program, MOBILE5a analysis (the 2000 CO plan included a revised analysis of the I/M program based on MOBILE5b), motor vehicle fleet characteristics, and numerous other appendices containing material describing the program.

The State Environmental Commission (SEC) and the Department of Motor Vehicles and Public Safety (DMV&PS), which was the predecessor agency to today's DMV and Department of Public Safety, revised the I/M regulations in 1996, 1998, and

2000 to, among other things, increase the cost enabling a registrant to qualify for a waiver (to \$450) and exempt "restored vehicles" from certain provisions of the program. The 2000 CO plan included a revised emissions analysis using MOBILE5b (see appendix E, section 7 of the plan) taking into account the changes in the program through 2000, including 100% emissions credit for their technician training and certification program.

In two supplemental SIP submissions dated January 30, 2002 and June 4, 2002, NDEP submitted current versions of the statutory and regulatory authority for the low enhanced I/M program in Clark County, draft revisions to Nevada Administrative Code ("NAC") 445B.580 relating to procedures for inspecting on-board diagnostics (OBD) systems on light-duty MY 1996 or newer vehicles (and a request that we "parallel process" those draft revisions), contractual materials related to emissions inspections analyzer equipment for licensed emission inspection stations, and contractual materials related to on-road testing.

The technical support document (TSD) provides an evaluation of the State's complete low enhanced vehicle I/M program relative to our requirements for such programs, including applicability; low enhanced I/M performance

standard, network type and program evaluation; adequate tools and resources; test frequency and convenience; vehicle coverage, test procedures and standards; test equipment; quality control; waivers; motorist compliance enforcement; quality assurance; enforcement against contractors, stations, and inspectors; data collection; data analysis and reporting; inspector training and certification; public information and consumer protection; improving repair effectiveness; compliance with recall notices; and on-road testing.

EPA Review of the Low Enhanced SIP Revisions

EPA's requirements for basic and enhanced I/M programs are contained in 40 CFR part 51, subpart S. The SIP revisions submitted by NDEP must be consistent with these requirements and must meet EPA's requirements for enforceability, as well as, CAA section 110(1) requirements. Although the required elements under Nevada's low enhanced I/M program differ from those described in EPA's I/M requirements for low enhanced programs, a side-by-side comparison demonstrates that, overall, they are not less stringent (see discussion of emissions modeling results in subsection 8, below).

1. Network Type, Test Frequency, Exhaust Emission Test Type and Vehicle Coverage

Basic and enhanced I/M programs can be centralized (i.e., state-run or a single contractor), decentralized (i.e., private small businesses), or a hybrid of the two, but the network type selected by a given state together with the other elements of the state I/M program must achieve the same or better level of emission reduction as the applicable performance standard. The low enhanced I/M performance standard assumes annual testing through a centralized testing network of all model year (MY) 1968 and newer light duty vehicles and light duty trucks, rated up to a gross vehicle weight rating (GVWR) of 8,500 pounds. The low enhanced I/M performance standard assumes that the exhaust emissions of the subject vehicles are subject to the idle test.

The current low enhanced vehicle I/M program for Las Vegas Valley and Boulder City requires two speed idle testing of all light-duty gasoline-powered vehicles MY 1968 through 1995, and for all heavy-duty gasoline-powered vehicles MY 1968 and newer on an annual basis. Until recently, light-duty gasoline-powered vehicles MY 1996 and newer were also subject to two speed idle testing; but recent changes in the State I/M program now require that such vehicles be tested via on-board diagnostic systems checks instead of the two speed idle test. For the State I/M program, "light-duty vehicles" refers to

passenger cars and trucks up to 8,500 pounds GVWR; "heavy-duty vehicles" refers to trucks which have a GVWR of 8,500 pounds or more. The network is decentralized and includes both test-and-repair and test-only stations. All 304 stations are privately owned stations, 96 of which are test-only stations.

2. Exhaust Standards for CO and Hydrocarbons (HC)

Standards for exhaust emission testing are specified in 40 CFR part 85, subpart W. Consistent with those standards, the State I/M program establishes, for those vehicles that are subject to emissions testing, maximum exhaust emissions for MY 1981 and newer vehicles of 1.2% for CO and 220 ppm for HC. For older light-duty vehicles (MY 1968 through 1980), maximum CO(%) and HC(ppm) range from 4.0% - 2.0% and 800 ppm - 500 ppm, respectively. The standards for heavy-duty gasoline-powered trucks MY 1981 and newer are 3.5% for CO and 1000 ppm for HC; for older heavy-duty vehicles (MY 1968 through 1980), maximum CO(%) and HC(ppm) range from 7.0% - 4.0% and 1,400 ppm - 1,000 ppm, respectively. As stated previously, all light-duty motor vehicles MY 1996 and newer are subject to on-board diagnostic system checks.

Diesel vehicles are tested under separate requirements, and the requirements that relate to diesel vehicles are not being approved into the SIP.

3. Geographic Coverage

EPA's I/M regulations require that state I/M programs be implemented in the entire urbanized area, based on the 1990 census. See 40 CFR 51.350. The designation for the low enhanced I/M areas are the boundaries of Hydrographic Basin 212, as established by the State Engineer, and the city limits of Boulder City.

4. Vehicle Coverage

The performance standard for low enhanced I/M programs assumes coverage of all MY 1968 and later light-duty vehicles and trucks up to 8,500 pounds GVWR. Other levels of coverage may be approved if the necessary emission reductions are achieved. See 40 CFR 51.356.

As mentioned above, the Nevada low enhanced I/M program applies to light-duty, gasoline-powered vehicles up to 8,500 pounds GVWR, and heavy-duty, gasoline-powered vehicles within the CO nonattainment area of Clark County and Boulder City. While still subject to annual vehicle registration requirements, new vehicles are exempt from emissions inspections under the Nevada I/M program until the third registration cycle. Subsequent annual registration or re-registration will require proof of compliance with emission testing. Vehicles MY 1967 and older, and motorcycles are also

exempt from the I/M testing. The two-year exemption of newer model year vehicles from emissions testing results in a relatively small loss in emission benefit since newer vehicles are generally anticipated to be cleaner than older vehicles. Furthermore, recent data suggest that newer vehicles stay cleaner longer due to the slower rate of emission control system deterioration.

The federal regulations also require basic and enhanced I/M programs to include inspection of all 1996 and later motor vehicles equipped with on-board diagnostic (OBD) systems. EPA has required that I/M programs begin OBD checks on January 1, 2002 (OBD mandatory start-up dates were delayed for one year). See 40 CFR 51.373. OBD consists of a computer which performs checks of a number of different vehicle systems for malfunctions or deterioration which could result in the vehicle exceeding its emissions standards and a malfunction indicator light which is required to be illuminated when the system detects a problem.

Some inspection stations in Las Vegas began OBD testing MY 1996 and newer OBD-equipped light-duty vehicles in February 2002 using the NV2000 analyzer (Nevada's previous I/M emissions analyzer, referred to as the "Nevada 94" analyzer, was not programmed to conduct OBD testing). By May 1, 2002,

all inspection stations in Las Vegas Valley were conducting OBD tests for MY 1996 and newer OBD-equipped vehicles.

Vehicles which receive an OBD inspection do not receive a two speed idle tailpipe test.

5. Emission Control Device Inspections

The low enhanced I/M performance standard assumes visual inspection of the positive crankcase ventilation valve on all 1968 through 1971 MY vehicles, inclusive, and of the exhaust gas recirculation valve on all 1972 and newer MY vehicles.

Nevada's program requires visual inspection of the presence of a properly installed gas cap on all gasoline-powered vehicles MY 1968 through 1980, and on heavy-duty gasoline-powered MY 1968 and newer. For light-duty, gasoline-powered vehicles MY 1981 through 1995 vehicles visual inspections include: (1) determining the presence of an exhaust gas recirculation valve, (2) examining the catalytic converter, air injection system and fuel inlet restricter; and (3) determining whether that equipment appears to be operating in accordance with the specifications of the manufacturer of the vehicle.

6. On-Road Testing

EPA regulations require on-road testing in enhanced I/M programs; on-road testing is optional for basic I/M programs. The on-road testing requirement may be met by measuring

on-road emissions through the use of remote sensing devices or through roadside pullovers including tailpipe or evaporative emission testing or a check of the OBD system. The federal regulations require on-road testing to evaluate annually the emission performance of 0.5% of the subject fleet statewide or 20,000 vehicles, whichever is less, per inspection cycle. See 40 CFR 51.371.

Nevada's legal authority for on-road testing was adopted by its Legislature in Senate Bill 570, which was signed into law by the Governor on July 5, 1995. This legislation added a new section to Chapter 445B of the Nevada Revised Statutes (NRS) providing authority to implement a remote sensing program as part of the vehicle I/M program (i.e., NRS 445B.798). In the June 2002 SIP Submittal, Nevada submitted a copy of the executed contract between the State and MD Laser Tech for on-road testing services, effective through June 30, 2003. DMV has contracted with MCI Worldcom to develop and maintain the vehicle information emission database (VID). The MCI Worldcom VID communicates with the DMV registration database. All emission test results are transmitted from the vehicle information emission database to the DMV's registration database. The MCI Worldcom system (VID) also maintains the licensee and administrative programs which are

used to identify emission stations and produce program statistical reports. On-road testing is located in the administrative program which can be used to store statistical records for vehicles tested through this process. Letters can also be generated to vehicle owners when regulatory action is determined to be proper. The MD Laser Tech contract calls for the contractor to perform remote sensing of motor vehicle exhaust emissions for a specified time period at specified locations within Clark County. The primary operational objective is to obtain information concerning gross emitting vehicles and use this information to ensure that these vehicles are brought into compliance with Nevada's motor vehicle regulations. Failure of a test conducted under the on-road testing program may lead to cancellation of vehicle registration under NRS 482.461 unless, within the prescribed period, the registered owner has the vehicle inspected and repaired (if necessary) and provides the DMV with evidence of compliance with the I/M requirements.

7. Waivers

EPA's requirements allow I/M programs to provide a waiver which lets the motorist comply with the program without meeting applicable test standards so long as certain prescribed criteria are met. See 40 CFR 51.360. In basic

programs, a minimum of \$75 for pre-1981 vehicles and \$200 for 1981 and newer vehicles must be spent by the motorist for appropriate repairs in order to qualify for a waiver. See 40 CFR 51.360(a)(6). Beginning January 1, 1998, enhanced programs must require motorists to spend at least \$450 for appropriate repairs. See 40 CFR 51.360(a)(7).

Nevada's I/M regulations (NAC 445B.590) require at least \$450 in expenditures on emissions-related vehicle repairs to qualify for a waiver in Clark County. Only the DMV may grant a waiver from the standards for emissions. Nevada's rules provide that a waiver from the applicable standards may only be issued after a retest is failed after qualifying repairs. The number of failed vehicles that require waivers is not expected to exceed the current waiver rate of approximately 1 percent. If the waiver rate exceeds 1 percent, Nevada will re-evaluate their procedures. EPA's model waiver rate is a 3 percent waiver rate, as a percentage of failed vehicles. Under the State's program, waivers are denied if the parts have not been installed or the repairs have not been performed as indicated on the receipts. A waiver applies for only the one year vehicle registration period. If a vehicle were to fail the next year, the procedure must be performed again.

8. Low Enhanced I/M Performance Standard

EPA's I/M regulations require that the state perform modeling using the most current version of EPA's mobile source emissions model to determine that the emissions levels achieved by the state I/M program meet the minimum performance standard. See 40 CFR 51.351(g). The minimum performance standard reflects the "model program" elements list in 40 CFR 52.351(g) (e.g. centralized annual testing of light-duty vehicles and trucks up to 8,500 GVWR MY 1968 and newer).

For the 2000 CO plan, Clark County updated the emissions analysis of the Nevada I/M program design using MOBILE5b. (The 1996 I/M SIP submittal included emissions analysis based on MOBILE5a.) The Nevada vehicle I/M program design includes: computerized test and repair (50% default values were used to discount emissions reduction benefits of Nevada's largely test-and-repair network relative to a test-only network); 1983 start date; 1999 last model year covered (reflects the first two years exemption on new vehicles and a model run for calendar year 2002); annual frequency; 1968 and newer model year coverage; vehicle types include light duty gasoline-powered autos and trucks (LDGV, LDGT1, and LDGT2) and heavy-duty gasoline-powered vehicles (HDGV); five-element visual inspection and gas cap check on all vehicles MY 1981 and newer; stringency rate for pre-1981 vehicles of 20 percent;

waiver rate of 1 percent; a 96 percent compliance rate; and 100% emissions credit for the State's technician training and certification program.

The emissions evaluation of the State's I/M program reflects two speed idle testing for all subject vehicles. Given an analysis year of 2002 and the State's two-year exemption for new vehicles, the emissions evaluation reflects two speed idle testing for all subject vehicles MY 1968 through MY 1999. The additional emissions reductions associated with OBD checks were not included in the emissions evaluation of the State's program or in the emissions evaluation of the low enhanced I/M performance standard with which the State's program is compared. (Recent changes in the State program now require OBD checks for subject vehicles MY 1996 and newer instead of the two speed idle test).

Section 7 of appendix E of the 2000 CO plan includes the input and output files from MOBILE5b. As shown in these files, the composite CO emissions factor for January 1, 2002 under the State's program (15.18 grams per mile) is below the corresponding emission level target (15.49 grams per mile) that reflects the EPA model program; and thus, the State's low enhanced I/M program for Las Vegas Valley and Boulder City meets the EPA performance standard for CO.

9. Legal Authority for the Program

The federal I/M rule requires that a state I/M SIP submittal cover the legal authority requiring or allowing implementation of the I/M program and providing either broad or specific authority to perform all required elements of the program as well as implementing regulations, interagency agreements, and memoranda of understanding. See 40 CFR 51.372(a)(5) and (7). Nevada's 1996 I/M SIP submittal included the legal authority and implementing regulations for the low enhanced vehicle I/M program in Las Vegas Valley and Boulder City. The 2000 CO plan, submitted as a SIP revision in 2000, and the two supplemental SIP submittals in 2002 provided updated statutes and regulations for this State program.

The legal authority for the program is vested in the Nevada SEC under Title 40 (Public Health & Safety) of the Nevada Revised Statutes (NRS), section 445B.210 and sections 445B.700 through 445B.845, and in the DMV under Title 43 (Public Safety; Vehicles; Watercraft) of NRS, sections 481.047-481.083, 482.155-482.283, 482.385, 482.461, 482.565, and 484.644-484.6441. The implementing regulations are found at Nevada Administrative Code (NAC) 445B.400 through 445B.735.

The federal I/M rule requires the state I/M program to

remain in operation until it is no longer necessary. See 40 CFR 51.372(a)(6). Nevada's I/M program does not undergo a sunset review. We believe that NDEP has demonstrated that the Nevada I/M programs will remain in operation as long as necessary and the requirements of 40 CFR 51.372 have been satisfied.

Conclusion and Proposed Approval of I/M program

We conclude, based on our review of the vehicle I/M program relative to our requirements and within the context of the 2000 CO plan, that the 1996 SIP Submittal for the low enhanced vehicle I/M program, as revised and supplemented through 2002, meets our requirements and contributes to the demonstration of attainment of the CO NAAQS by the applicable date. We, therefore, propose to approve the vehicle I/M program for Las Vegas Valley and Boulder City into the Nevada SIP. Specifically, we propose to approve the statutory and regulatory basis for the revised program in NRS, title 40, section 445B.210 and sections 445B.700 through 445B.845, and title 43, sections 481.047-481.083, 482.155-482.283, 482.385, 482.461, 482.565, and 484.644-484.6441, as amended by Nevada through 2001, and NAC sections 445B.400 through 445B.735 (not including 445B.576, 445B.577, and 445B.578), as adopted through March 8, 2002, by SEC and DMV, and, in the case of

draft revisions to NAC 445B.580 *Inspection of vehicle: Procedure (NRS 445B.785)*, as submitted by NDEP by letter dated January 30, 2002. We will consider final action on the vehicle I/M program once we receive the final adopted version of NAC 445B.580. (This section includes final test procedures and equipment used for inspecting certified OBD systems. A new section number will replace NAC 445B.580.) Our approval of the statutory and regulatory basis for the revised vehicle low enhanced I/M program would supercede the existing statutory and regulatory basis for vehicle I/M in the Nevada SIP (as approved by EPA in 1981 and 1984) as it relates to Las Vegas Valley.

F. Are any special fuels used in motor vehicles operated in Las Vegas Valley?

Wintertime gasoline specifications in Clark County reduce CO emissions in Las Vegas Valley. Specifically, these wintertime specifications relate to oxygen, Reid Vapor Pressure (RVP), sulfur content and aromatic hydrocarbons ("aromatics"). In a separate, prior action, we approved the wintertime oxygenated fuels regulation in Clark County under sections 187(b)(3) and 211(m) of the Act. See 64 FR 29573 (June 2, 1999). The low RVP wintertime gasoline regulation was submitted as part of the 1995 CO plan and the most recent

version of that regulation was submitted to EPA on June 4, 2002. EPA is proposing to approve that regulation into the Nevada SIP in this notice, as discussed below. The wintertime sulfur and aromatics specifications are contained in Clark County's Cleaner Burning Gasoline regulation, which has been submitted as an additional control measure in the 2000 CO plan and which is discussed following the low RVP wintertime gasoline discussion.

Low RVP wintertime gasoline

RVP is a measure of the stabilized pressure exerted by a volume of liquid at 100° F, and is generally used as a measure of the volatility of gasoline fuel. Fuels with high RVP values volatilize more readily than fuels with low RVP values. The effect of the increased rate of volatilization at any given RVP value is largely dependent on ambient temperature. Lowering the RVP specification of gasoline reduces CO emissions from vehicles equipped with functional evaporative control systems (e.g., on-board carbon-canister). The evaporative control systems adsorb gasoline vapors which are then desorbed into the vehicle's fuel intake system causing enrichment of the fuel mixture and an increase in CO exhaust emissions. A lower volatility gasoline decreases the amount of vapors adsorbed by carbon canisters which in turn lowers

subsequent fuel mixture enrichment and CO exhaust emissions. Newer vehicles operate "closed-loop," using oxygen sensors and constantly adjusting the air/fuel ratio. Such vehicles, which represent virtually all 1990 and later cars, are programmed to make adjustments to avoid undue enrichment (and associated emission increases) during canister purge. As a result, the effect of lower RVP on CO emissions on average will be larger for open-loop than for closed-loop cars, but there is considerable variation among manufacturers, models and model years.

The Nevada legislature granted authority to adopt regulations relating to fuel standards to the State Board of Agriculture through NRS chapter 590, section 590.070. Nevada Board of Agriculture's wintertime RVP regulations are found in chapter 590, section 590.065 of the Nevada Administrative Code ("NAC 590.065"). The specific regulation that was submitted as a control measure in the 1995 CO plan was adopted by the Board of Agriculture on September 21, 1995. Since that date, this regulation has been revised several times, e.g. to modify the applicable wintertime period, most recently on October 28, 1998. The current regulation, NAC 590.065 paragraphs (3) and (4), limits the RVP of gasoline sold in Clark County during the winter season (October 1 through March 31) to 9.0 pounds

per square inch (psi) with no allowance for ethanol blended fuel. NDEP submitted the current adopted regulation to us for incorporation into the SIP under a letter dated June 4, 2002.

The wintertime low RVP requirement is enforced through random sampling and testing conducted by the Nevada Department of Agriculture. Funding for enforcement and monitoring activities associated with the RVP requirement is provided through a portion of the annual vehicle emission testing certificate fee.

To evaluate the effects of RVP on exhaust emissions, state and local air agencies use our MOBILE model. CCDCP used MOBILE5a to evaluate the CO emissions benefits of low RVP under wintertime conditions for the 1995 CO plan. At the time of the 1995 CO plan, the supporting documentation indicated that CCDCP properly modeled RVP controls using appropriate temperatures. However, members of the Western States Petroleum Association (WSPA) objected to the 1995 CO plan's conclusion that gasoline with higher RVP results in higher CO emissions, especially during vehicle startup. They asserted that MOBILE5a overestimated the benefit of reducing RVP and expressed their concern over the related emission reduction predictions contained in the plan.

To address these concerns, CCHD commissioned a study of

vehicle emissions to assess the validity of MOBILE5a results. Because of the unusual meteorological conditions in Las Vegas Valley that are associated with historic CO exceedances, and the relative lack of data within the MOBILE5a model for evaluating the RVP effects on CO emissions under colder temperatures, the study called for a shift in the normal series of events specified by the Federal Test Procedure for vehicle certification to simulate the effect of a diurnal temperature profile accompanied by a morning and evening commute.

This study culminated in the publication of the Society of Automotive Engineers' (SAE971726), *Effects of RVP Reduction on Vehicle CO Emissions During Las Vegas and Los Angeles Winter Conditions - Petroleum Environmental Research Forum Project Number 95-06* in May 1997. As part of this study, two fleets of vehicles were emissions-tested to determine the effect of gasoline RVP reductions on tailpipe CO emissions in Las Vegas and Los Angeles under conditions typical of winter CO exceedances. The analyses had two locations and two RVP's (9 and 12 psi), including separate sets of temperature ranges, base gasoline types, and oxygenate types and levels. The conclusion was that RVP reduction is a significant control measure for reducing CO emissions under conditions typical of

CO exceedances in Las Vegas and Los Angeles. It was estimated that reducing RVP by 3 psi (from 12 psi to 9 psi) would reduce winter CO emissions by 12% in Las Vegas and between 0 and 8% in Los Angeles.

As part of our decision whether to approve the State's low RVP wintertime gasoline regulation into the Nevada SIP, we also must consider whether the fuel specification in that regulation is preempted under the Act. Under section 211(c)(4)(A) of the Act preempts certain state fuel regulations by prohibiting a state from prescribing or attempting to enforce "any control or prohibition respecting any characteristic or component of a fuel or fuel additive" for the purposes of motor vehicle emission control, if EPA has prescribed under section 211(c)(1), "a control or prohibition applicable to such characteristic or component of the fuel or fuel additive," unless the state prohibition is identical to the prohibition or control prescribed by EPA. The Federal controls on RVP, promulgated under section 211(h) and section 211(c)(1), apply only in the summer months. There is no Federal RVP control applicable to gasoline in the wintertime, and thus no Federal preemption of the State's wintertime low RVP requirement.

Therefore, we are proposing to approve the State's

wintertime low RVP requirement into the Nevada SIP as a CO control measure [i.e., NAC 590.065, as adopted on October 28, 1998] because the State has demonstrated that the measure is enforceable, contributes to the attainment demonstration by reducing vehicular CO emissions in the Las Vegas Valley nonattainment area, and is not preempted under section 211(c)(4) of the Act. The TSD provides a copy of the State's low RVP wintertime regulation and additional information on the emissions effects of the regulation.

Cleaner Burning Gasoline

The Clark County Board of Health, which governs the CCHD, adopted a wintertime Cleaner Burning Gasoline (CBG) regulation in 1999 that results in lower CO emissions from motor vehicles. The CBG regulation was included as one of the principal additional control measures included in the 2000 CO plan. The CBG regulation requires that gasoline sold in Clark County comply with limits on the maximum levels of sulfur and aromatics during the period from November 1 to March 31.

As noted previously, the air-quality-related regulatory authority that had been vested in the County Board of Health was transferred to the County Board of Commissioners in 2001. On July 24, 2001, the Clark County Board of Commissioners adopted County ordinance #2627, which, among other items,

adopted the Board of Health's air quality regulations then in effect, including the CBG regulation, except for substitutions in the references to the applicable agency (e.g., "Clark County Air Quality Management Board" was substituted for "Clark County District Board of Health"). We have not yet received CCAQMB's wintertime CBG regulation (i.e., CCDAQM regulation, section 54) from NDEP as a SIP submittal, but are proposing approval of the CCAQMB's CBG rule at this time based on the condition that the State submit to EPA the CCAQMB version of the rule prior to our taking final action. In so doing, and as discussed more fully below, we are proposing approval of CCAQMB's CBG rule based on the substance of the Board of Health's CBG regulation and our review of the analysis of that regulation contained in the 2000 CO plan because the two versions of the CBG rule are the same (but for the substitution in agency references as noted above).

The Board of Health's CBG regulation (CCHD regulation, section 54) and the related technical support document are in Appendix D, section one, of the 2000 CO plan. The regulation includes sections on: definitions; applicability of the standards; the standards for sulfur content and aromatics content; sampling, testing and recordkeeping; requirements pertaining to CBG blendstock for oxygenated blending and

downstream blending; and enforcement.

The CBG regulation provides two alternative ways to be in compliance for the specifications on sulfur and aromatics: 1) marketers can meet a flat limit on a per gallon basis or 2) marketers can comply via averaging, with each per gallon sample not to exceed a certain cap. (The CBG rule does not change current State and local regulations for wintertime RVP (9 psi) and minimum oxygen content (3.5%).) A summary of the limitations is shown in Table 6.

Table 6 - Specifications for Aromatics and Sulfur In Clark County CBG:

	<u>Compliance Method</u>		<u>Compliance Method</u>	
	I		II	
	<u>Flat Limit</u>		<u>Average</u>	<u>Cap</u>
Sulfur, ppm	40		30	80
Aromatics, percent	25		22	30

As noted above, the CBG regulation establishes gasoline standards for sulfur and aromatics, and as noted above in connection with low RVP gasoline, under section 211(c)(4) of the Act, states are preempted from prescribing any control or prohibition respecting any characteristic or component of a fuel, where there is a nonidentical Federal control or prohibition applicable to such characteristic or component.

See section 5 of the TSD for further discussion of this prohibition and EPA's guidance on approval of a state fuel measure under section 211(c)(4)(C).

Our analysis of preemption of the CBG regulation addresses the specifications for sulfur and aromatics. To determine whether a state fuel requirement is preempted by a federal requirement, we compare the applicable federal fuel requirements in the area with the proposed state fuel requirements. For the purposes of this analysis, the federal fuel requirement in the Las Vegas Valley CO nonattainment area is federal conventional gasoline.

In this proposed rulemaking, EPA does not need to determine whether the federal requirements for conventional gasoline include requirements for sulfur and aromatics which would preempt the CBG regulation under section 211(c)(4)(A). If the sulfur and aromatics requirements are not preempted, there is no bar to our approving them as a SIP revision.⁹ If they are preempted, we may approve the CBG regulation as necessary under section 211(c)(4)(C) if we could approve each of these requirements as a SIP revision, i.e., if CCHD's

⁹ It is clear, however, that as of December 21, 1999, EPA has prescribed specific limits on maximum sulfur content in conventional gasoline. See, Tier 2 Motor Vehicle Emissions Standards and Gasoline Sulfur Control Requirements, 65 FR 6698, 6765 (February 10, 2000).

documentation for the regulation shows that each requirement (i.e., the sulfur limit and the aromatics limit) is "necessary" to achieve the CO NAAQS.

Sulfur and aromatics specifications both reduce CO emissions. Emissions modeling data shows that each of these controls, independently, contributes to CO emissions reductions. Thus, each requirement can be determined "necessary" to achieve the CO NAAQS if the remaining requirements of the necessity determination are met.

To make a necessity determination, we must consider whether there are other reasonable and practicable measures available that would produce sufficient emissions reductions to attain the CO NAAQS without implementation of the CBG requirements. Section 211(c)(4) is intended to ensure that a state resorts to a fuel measure only if there are no available practicable and reasonable non-fuel measures. In demonstrating that measures other than sulfur and aromatics requirements for wintertime CBG are unreasonable or impracticable, a state need not address the reasonableness or practicability of other state fuel measures.

CCHD conducted an extensive public process to evaluate possible future emissions control options, including revisions to the current I/M program. CCHD considered eight control

options other than wintertime CBG requirements for sulfur and aromatics. These options were: (1) separation of test and repair stations to make its I/M program a "high" enhanced program, (2) creation of one-way streets, (3) adding powerful air propellers to certain developments, (4) adding 600 non-conventional-fueled buses to its municipal fleet, (5) transportation control measures, (6) alternative fuels requirements for municipal fleets, (7) lower smog cutpoints for the I/M program, and (8) episodic woodburning control. The first four options were rejected as unreasonable or impracticable due to unavailability and/or ineffectiveness.

The remaining four control measures were subject to further evaluation, but none of these measures provides significant emissions reductions. CCHD's modeling calculations show that, even with emissions reductions attributed to these four remaining measures, the CO design value would not reach 9.0 ppm by the end of 2000 without adding the reductions due to sulfur and aromatics controls for wintertime CBG.

Estimates prepared for the 2000 CO plan indicate that implementation of the CBG regulation would reduce CO emissions by 31.9 tons per day and 53.96 tons per day in years 2000 and 2020, respectively. These estimates are based on use of the

Complex model (with CO added), ("CO Complex model"), in combination with the MOBILE5b model to show the emissions effects that are directly related to the specific fuel specifications in the CBG regulation. (See appendix E, section 1, of the 2000 CO plan.) In March of 1999, EPA reviewed and approved the use of the CO Complex model for CO SIP development purposes, due to the unique fuel program in use in Clark County and the inability of MOBILE5b to fully assess the impact of all of the fuel parameters. At that time, the CO Complex model was the best approach available to assess these fuel parameters.

The CO Complex model was approved for SIP development purposes in a letter dated March 23, 1999 from Roxanne Johnson, EPA Region 9, to Michael Naylor, Director, Air Pollution Control Division, CCHD.

All future transportation conformity determinations for CO in Clark County must be based on the CO Complex model with MOBILE5b until the grace period for MOBILE6 has concluded. Because MOBILE6 is not capable of estimating the benefits of this exact fuels program, EPA will work with Clark County prior to the end of the MOBILE6 conformity grace period to determine how the benefits of this program should be estimated.

Results from the modeling demonstration showed that, by implementing the wintertime CBG regulation, along with the other measures identified in the CO attainment SIP, the Las Vegas Valley should achieve the 8-hour CO NAAQS of 9 ppm by the December 31, 2000 attainment deadline.

Although CCHD did not identify the estimated quantity of CO emissions that must be reduced in order to achieve the CO NAAQS, it did estimate the CO emissions reductions attributable to each of the individual control measures (including the CBG regulation) that were subject to further evaluation. CCHD's modeling calculations showed that, without the emissions reductions attributable to the CBG regulation, Las Vegas Valley would not achieve the CO NAAQS by the end of the year 2000. Therefore, the emission reductions from the CBG regulation are necessary to achieve the CO NAAQS.

In general, to be approved as part of a SIP, regulations must include adequate enforceability provisions, such as clear indications of what constitutes a violation, who is liable, and what defenses are available. Under the CBG regulation, those who fail to comply with the CBG regulation are subject to enforcement action and may be assessed penalties of up to \$10,000 per day per section violated. CCDAQM has adopted the requirements developed by CCHD for every entity in the

gasoline distribution system to ensure that Las Vegas Valley will receive gasoline that meets the wintertime CBG standards. The requirements, which include registration of gasoline suppliers, testing and sampling, compliance surveys, and record keeping and reporting, apply to any producer, importer, terminal, pipeline operator, trucker, rail carrier, or retailer.

The requirements imposed by the wintertime CBG regulation apply to activity occurring both within and outside of Clark County and the State of Nevada. CCDAQM has been assigned the rights and duties of an agreement between CCHD and the California Air Resources Board (CARB) to have CARB sample and test CBG at the refineries in Southern California.

Clark County also made an agreement with the Nevada Department of Agriculture to check fuel at the final destination (i.e., Clark County). The Department of Agriculture agreed to check sulfur and aromatics content of CBG fuel along with their normal testing. They would notify the CCDAQM in the event that any sample exhibits non-compliant CBG characteristics.

We have evaluated the wintertime CBG regulation and have determined that it is consistent with section 110 of the CAA and EPA regulations. We have also found that the various

wintertime CBG requirements are necessary for the Las Vegas Valley nonattainment area to achieve the CO NAAQS, pursuant to section 211(c)(4)(C) of the Act. Therefore, based on the substance of the submitted Board of Health wintertime CBG regulation, and the County ordinance adopting the CBG regulation as in effect in mid-2001 (except for changes to agency references), we are proposing to approve the CCAQMB's wintertime CBG regulation (i.e., CCDAQM regulation, section 54) into the Nevada SIP for the Las Vegas Valley CO nonattainment area based on the condition that the State submit to EPA the CCAQMB version of the rule prior to our taking final action.

G. Are there any other programs that reduce overall motor vehicle emissions in Las Vegas?

The 2000 CO plan includes two additional programs to reduce overall emissions of motor vehicles. These programs are a Transportation Control Measure / Transportation Demand Measure ("TCM/TDM") program and an alternative fuel program for government fleets.

TCM/TDM Program

Section 187(b)(2) of the Act requires states with serious CO nonattainment areas to submit a SIP revision that includes transportation control strategies and measures to offset any

growth in emissions due to growth in vehicle miles traveled (VMT) or vehicle trips. In developing such strategies, a state must consider measures specified in section 108(f) of the Act and choose from among and implement such measures as necessary to demonstrate attainment with the NAAQS.

Transportation control measures ("TCMs") are designed to reduce mobile pollutant emissions by either improving transportation efficiency or reducing single-occupant vehicle trips. TCMs can be divided into two general strategies: Transportation System Management (TSM) and Transportation Demand Management (TDM). The former is intended to improve efficiency of existing transportation infrastructure such as optimized use of capacity and improved speeds to reduce travel time delays, and the latter is intended to reduce the number of single-occupant vehicles on roadways by shifting people from single-occupant vehicles to transit and high-occupancy vehicles. In the process of preparing the 2000 CO plan, Clark County commissioned a study to estimate the CO reductions due to various individual TCMs and packages of TCMs and to identify those TCMs that showed the greatest potential for reducing CO emissions in the Valley.

The findings and recommendations of this TCM study led to the development by RTC of the CAT MATCH commuter services

program, which is a voluntary TDM program that includes employer-based commuter incentive programs, telecommuting incentives and area-wide ridesharing programs. On June 10, 1999, RTC adopted Resolution No. 177, which establishes guidelines for administering the CAT MATCH commuter services program. Portions of the CAT MATCH program became operational in July 1999. Also, in connection with the CAT MATCH program, RTC adopted Resolution No. 186 (on June 8, 2000), which commits that agency to implement the CAT MATCH program, monitor participation levels, prepare annual reports comparing actual participation levels with projected levels, and remedy any shortfall of CO emission reductions resulting from actual participation levels being lower than predicted levels.

The CAT MATCH program was included as an additional control measure in the 2000 CO plan. The 2000 CO plan estimates that the CAT MATCH program would reduce CO emissions by 0.3 tpd in 2000, 1.8 tpd in 2010, and 2.3 tpd in 2020, and refers to our Voluntary Mobile Source Emission Reduction Program (VMEP) policy, described below, in support of the identification of the CO emissions reductions from that voluntary program as part of the overall CO control strategy.

A memorandum from Richard Wilson dated October 24, 1997 sets forth our policy and interpretation regarding the

granting of explicit credit for VMEPs under section 110 of the Act. The VMEP policy was developed since we wanted to encourage areas to consider innovative methods in achieving air quality goals. Under the VMEP policy, emissions credit can be approved under certain circumstances and if the appropriate agency has committed to monitoring and evaluating the effectiveness of the voluntary measure, to reporting on the results of the evaluation, and to remedying any emissions shortfall if the voluntary measure proves to be less effective than projected in the plan.

We have evaluated the CAT MATCH program under our VMEP policy and conclude that the emissions reduction credit in the 2000 CO plan for that voluntary program is appropriate. We also have determined that the CAT MATCH program complies with section 187(b)(2) of the Act. Therefore, we propose to approve the CAT MATCH program under section 187(b)(2) of the Act, and we propose to approve into the Nevada SIP the commitments by RTC to develop, implement, monitor, report, and remedy any emissions shortfalls from this voluntary program under RTC's Resolution No. 177 (adopted June 10, 1999) and Resolution No. 186 (adopted June 8, 2000). Our full review of the TCM/TDM measure is included in the TSD for this proposed action.

Alternative Fuels Program

The Energy Policy Act of 1992 (EPACT) requires federal, state, and fuel provider fleets to acquire alternative fuel vehicles. The State of Nevada has chosen to develop a program that extends alternative fuel requirements to local government agencies in their two most populated counties, Washoe and Clark, and that provides for a more aggressive schedule for implementation than would otherwise be required under EPACT. The State law establishing this program is set forth at NRS chapter 486A. NRS chapter 486A authorizes the State Environmental Commission (SEC) to promulgate implementing regulations, and SEC's regulations are set forth in NAC chapter 486A. Specifically, SEC's regulations require applicable government agencies to acquire and use an increasing proportion of alternative fuel vehicles up to 90% for year 2001 and beyond when acquiring additional or replacement vehicles for its fleet. The program began in 1995, and the 2000 CO plan indicates that nearly all applicable agencies have chosen to comply by acquiring natural gas vehicles and that presently there are over 1,400 alternative fuel vehicles operating in Las Vegas Valley. The regulations also include record keeping and reporting requirements. Under the regulatory scheme, the State

Department of Conservation and Natural Resources is responsible for enforcement.

The 2000 CO plan included the alternative fuels program set forth in NAC chapter 486A, as revised through April 2000, as an additional control measure. In estimating emission reductions in Clark County associated with this measure, the 2000 CO plan assumes that most fleets have chosen to purchase CNG vehicles to comply with the alternative fuel regulations and that the number of CNG vehicles is expected to be 2,925 by year 2010, and 3,568 by year 2020. Under these assumptions, implementation of the alternative fuel vehicle programs results in emission reductions of 0.4 tpd in 2000, 1.1 tpd in 2010 and 1.4 tpd in 2020. The State's alternative fuel program contributes to the effort to attain and maintain the CO NAAQS within Las Vegas Valley and meets all CAA requirements (see the TSD for more details). Therefore, we are proposing to approve the alternative fuel program into the Nevada SIP for the Las Vegas Valley CO nonattainment area. Specifically, we propose to approve, into the Nevada SIP, the legal authority vested in SEC under NRS Chapter 486A and the implementing regulations set forth in NAC Chapter 486A, as amended through April 20, 2000 by the State Environmental Commission.

H. Are there controls on stationary sources of CO?

Section 172(c)(5) of the Act requires states with nonattainment areas to revise their SIPs to include a permit program for the construction and operation of new or modified major stationary sources in the nonattainment areas.

Within Clark County, the State of Nevada, rather than the county, has jurisdiction over plants which generate electricity by using steam produced by the burning of fossil fuel. See NRS 445B.500. With respect to such plants, EPA is not requiring the State to submit new source review permit regulations under section 172(c)(5) of the Act because the State has adopted a regulation that prohibits new power plants or major modifications to existing power plants under its jurisdiction within the Las Vegas Valley nonattainment area (i.e., hydrographic area 212). See NAC 445B.22083.

Clark County has jurisdiction over all other stationary sources within the county, and with respect to those sources, we approved the new source review permit program for Clark County in 1999. See 64 FR 25210 (May 11, 1999). This program defines major stationary sources of CO within Las Vegas Valley as those that have the potential to emit 70 tons per year or more, which is more stringent than required under section 302(j) of the Act and requires such new or modified sources

locating within the nonattainment area to obtain offsets in addition to installing control equipment representing the lowest achievable emission rate.

However, on August 29, 2001, the U.S. Court of Appeals for the Ninth Circuit vacated our approval of Clark County's new source review program. See *Hall v. EPA*, 273 F.3d 1146 (9th Cir. 2001). The court vacated our approval, not because EPA had acted unreasonably in finding that the program complies with the specific requirements of section 172(c)(5), but rather, because EPA did not have an adequate basis under section 110(1) of the Act to conclude that the new program, even if it met the minimum requirements of section 172(c)(5), would not interfere with attainment of the NAAQS by the applicable deadline.

We intend to re-propose an action on the new source review program in a separate notice in the near future. However, we note here that the emissions inventory and attainment demonstration from the 2000 CO plan that we are proposing to approve in this notice includes stationary sources and the projections of emissions from those sources appear to be generally consistent with the new source review program as submitted to EPA. Specifically, the 2000 CO plan assumes that CO emissions from major CO stationary sources

will remain unchanged (which is consistent with the offset requirement in their new source review program) whereas the plan projects growth in CO emissions from non-major stationary sources (which are not subject to federally-enforceable offsets under their program).

Section 187(c) of the Act requires that, in the case of CO nonattainment areas classified as serious and subject to significant stationary source emissions of CO, the term "major stationary source" is to include any stationary source which emits, or has the potential to emit, 50 tons per year or more of CO. The 2000 CO plan concludes that Las Vegas Valley is not subject to significant stationary source emissions of CO and thus not subject to the requirements of Section 187(c). Generally, significance in this context is associated with areas with individual stationary sources that generate 5,000 tons of CO per year or more. (See guidance provided in a memorandum from William G. Laxton, Director, Technical Support Division, EPA, dated May 13, 1991.) Since the highest CO-emitting facility shown in the stationary source inventory for the 2000 CO plan emits only 1,100 tons per year of CO, we agree with the conclusion that stationary sources are not significant contributors to ambient CO levels in Las Vegas Valley and that section 187(c) of the Act does not apply

within the Las Vegas Valley CO nonattainment area.

I. What expected growth of vehicle traffic is projected for the area?

Section 187(a)(2)(A) of the Act requires states with CO nonattainment areas with design values greater than 12.7 ppm, such as Las Vegas Valley, to submit a plan revision that contains a forecast of vehicle miles traveled (VMT) in the nonattainment area for each year until attainment of the CO NAAQS. Also, this plan revision must provide for annual updates of the VMT forecasts to be submitted to EPA along with annual reports regarding the extent to which the preceding annual forecasts proved to be accurate. These annual reports must contain estimates of actual VMT in each year for which a VMT forecast was required.

The 2000 CO plan provides VMT forecasts for every year from 1997 through the attainment year of 2000 and then nearly every year between 2001 and 2030. The VMT forecasts were estimated using recent transportation modeling results from RTC that incorporated more recent socioeconomic data than had been used for VMT forecasts contained in the earlier plans. The VMT forecasts are displayed in Table 7-1 of Chapter 7 of the 2000 CO plan. The forecasts are broken down by roadway type. The forecasts predict increases in VMT of roughly 5%

each year through 2005 consistent with recent trends, then roughly 4% each thereafter until 2020, and then marginal decreases each year between 2020 and 2030 based on an assumption of highway saturation by that time resulting in a mode shift to mass transit, ride sharing, and other modes.

RTC is the local agency responsible for preparing VMT forecasts. Through Resolution No. 149, as adopted on July 13, 1995, RTC has committed to preparing annual VMT estimates and forecasts and to submitting these reports ("VMT tracking reports") to EPA. Under section 187(a)(3) of the Act, annual VMT tracking reports provide a potential basis for triggering implementation of contingency measures in the event that estimates of actual VMT exceed the forecasts contained in the prior annual VMT tracking report.

We propose to approve the VMT forecasts contained in the 2000 CO plan as meeting the section 187(a)(2)(A) requirements. However, it is noted that section 187(a)(2)(A) does not require forecasts extending as far into the future as those provided in the 2000 CO plan, and, while our approval of the emissions budgets through 2020 discussed in this notice implies approval of the VMT forecasts through 2020, no such implied approval is intended for VMT forecasts beyond 2020. Also, we propose to approve RTC's commitment through

Resolution No. 149 to prepare and submit annual VMT tracking reports.

J. Does the plan include contingency measures?

Section 187(a)(3) of the Act requires states with CO nonattainment areas with design values greater than 12.7 ppm, such as Las Vegas Valley, to submit a plan revision that provides for contingency measures. The Act specifies that such measures are to be implemented if any estimate of VMT submitted in an annual VMT tracking report exceeds the VMT predicted in the most recent prior forecast or if the area fails to attain the NAAQS by the attainment date. As a general rule, contingency measures must be structured to take effect without further action by the state or EPA upon the occurrence of certain triggering events.

EPA believes that, for exceedances of a VMT forecast, one appropriate choice of contingency measures would be to provide for the implementation of sufficient VMT reductions or emissions reductions to counteract the effect of 1 year's growth in VMT while the state revised its SIP (including VMT projections) to provide for attainment by the applicable date. These measures may offset either the excess VMT in the nonattainment area or the additional CO emissions in the area that are attributable to the additional VMT. In the case of

Las Vegas Valley, the annualized rate of growth in VMT over the 2000 to 2005 period is approximately 5 percent; therefore, the contingency measures should have the potential to achieve that level of reduction in VMT or a corresponding reduction in CO emissions, which would be approximately 16 tons per day based on the 2000 CO motor vehicle estimate of 310 tons per day.

For a failure to attain the CO NAAQS by the attainment date, EPA believes that contingency measures should have the potential to provide a reduction in CO emissions equivalent to 3 percent of the CO inventory. In this instance, 3 percent of the total CO inventory projection in 2000 (387 tons per day) is approximately 12 tons per day.

The three contingency measures included in the 2000 CO plan include:

S On Board Diagnostics II (OBD II) Testing¹⁰;

¹⁰ Some variety of OBD system has been an option on certain vehicle models since the early 1980's, standardized OBD systems (also known as OBD II) were not introduced until MY 1994, and such systems did not appear on all new light-duty vehicles sold in this country until MY 1996. Therefore, for I/M purposes, EPA does not require or recommend that pre-1996 MY vehicles be subject to OBD inspections. Additionally, EPA's MOBILE6 emission factor model will not provide emission reduction on pre-1996 MY vehicles. (Nevada DMV intends to submit final adopted regulations that are consistent with EPA's definition for OBD systems.

- S Lower I/M Program Cutpoints; and
- S On Road Remote Sensing.

From 1997 through 2000, when the Las Vegas serious area plan was being developed, the implementation deadline for mandatory OBD testing in I/M programs had not yet passed, and the plan identified OBD II testing as a contingency measure that would be triggered by the occurrence of either unanticipated growth in VMT or a CO exceedance. However, the deadline for mandatory OBD testing is now expired. See 66 FR 18156 (April 5, 2001). Normally, a required measure does not qualify as contingency measure; however, a measure that represents a requirement but that is designed to allow for implementation prior to its implementation deadline may qualify as a short-term contingency measure. In this instance, because the implementation deadline for mandatory OBD testing had not passed at the time of plan development and adoption and the emissions benefits from mandatory OBD testing were not included in the attainment demonstration, and because of Clark County's commitment to provide documentation and additional measures if necessary, as explained below, we propose to approve OBD testing as a contingency measure of the 2000 CO plan for the purposes of section 187(a)(3) of the Act. As noted previously, in today's action, we are proposing to

approve (under our parallel processing procedure) revisions to the I/M program to implement OBD II testing based on draft revisions to the implementing regulations (specifically, revision to NAC 445B.580) submitted by NDEP under a letter dated January 30, 2002. Thus, as a practical matter, this contingency measure will not actually be contingent upon occurrence of any particular event but will be implemented fully by the end of 2002.

The 2000 CO plan did not provide emission reduction estimates for implementation of OBD II testing because of the limitations of the vehicle emissions model (MOBILE5b) available at the time of plan preparation. However, in adopting the 2000 CO plan (resolution dated August 1, 2000), Clark County committed to preparing and submitting a plan revision to EPA that quantifies the actual benefits of the contingency measures contained in the plan, within one year of the release date of pending applicable guidance protocols and models. The County also committed to monitoring the emission reductions associated with the plan's control measures and remedying in a timely fashion any shortfall for the purpose of complying with SIP control measure requirements of the Act.

In January 2002, EPA approved and announced the availability of the MOBILE6 motor vehicle emission factor

model for official use outside of California. See 67 FR 4254 (January 29, 2002). Unlike MOBILE5b, MOBILE6 has the capability of quantifying the emissions reductions associated with implementation of OBD. Based on Clark County's commitment cited above, we anticipate that the County will develop and, via NDEP, submit emissions estimates by the end of January 2003 showing the emissions reductions associated with OBD testing in Clark County and identifying additional contingency measures, if necessary, to provide needed emissions reductions if VMT growth exceeds projections or if the CO NAAQS is exceeded.

In addition, the Nevada State Environmental Commission adopted a resolution dated April 9, 1999 that directs NDEP, DMV, the Department of Agriculture, and Clark County to work together to identify and propose to the appropriate adopting body the most cost-effective and reasonably available control strategies necessary to achieve and maintain the NAAQS and to ensure conformity between the transportation improvement program and the SIP. Through this resolution, the Nevada State Environmental Commission further committed itself to adopting appropriate emission reduction measures as necessary to ensure that the NAAQS can be achieved and maintained in Las Vegas Valley.

We agree that MOBILE6 is the appropriate tool to use in estimating emissions reductions from OBD testing, and we agree that implementing OBD testing will provide substantial emissions reductions beyond those already accounted for in the 2000 CO plan. We expect that OBD testing will ultimately be shown by Clark County to provide emissions reductions beyond the minimum we believe contingency measures must provide. Taken together with the County's commitments to provide emissions documentation and remedial contingency measures, if necessary, and the Nevada State Environmental Commission's April 9, 1999 resolution, we propose to approve OBD II testing as meeting section 187(a)(3) requirements.

We are proposing to disapprove the other contingency measures in the 2000 CO plan, lower I/M program cutpoints and on-road remote sensing. With respect to lower I/M program cutpoints, we are proposing disapproval because the measure has not been developed to allow for implementation (upon the occurrence of triggering events) without further action by the State. With respect to on-road remote sensing, in proposing disapproval, we note that a minimum level of on-road testing is required for all enhanced I/M programs (see 40 CFR 51.51.351(b)), and to the extent that this particular measure provides for that minimum level of testing, it does not

qualify as a contingency measure.

An on-road testing program designed to obtain measurable emission reductions over and above those already predicted to be achieved by other aspects of the I/M program can serve as a contingency measure, but the description and documentation of the on-road remote sensing contingency measure as included in the 2000 CO plan does not provide us with the basis to conclude that it would provide emissions reductions beyond those already predicted to be achieved by other aspects of the I/M program. Nonetheless, we have concluded that these two measures are not necessary for plan approval, and we propose to find that OBD II testing and related commitments are sufficient in themselves to comply with section 187(a)(3) of the Act. Therefore, our disapproval of these contingency measures, if finalized, would not trigger sanctions clocks under section 179(a) of the Act.

K. Are the emissions budgets approvable?

Section 176(c)(1) of the Act prohibits federal agencies from permitting, approving, or funding any activity in nonattainment or maintenance areas that does not conform to a SIP once the SIP has been approved by EPA under section 110 of the Act. Section 176(c)(1) also prohibits metropolitan planning organizations (MPOs), such as the Clark County RTC,

from approving any project, program, or plan that does not conform to a SIP once the SIP has been approved by EPA under section 110 of the Act. With regards to regional transportation plans and program, MPOs must demonstrate consistency between motor vehicle emissions estimates under those plans and programs and corresponding motor vehicle emissions budgets contained in the applicable SIP. On March 2, 1999, the United States Court of Appeals for the District of Columbia Circuit issued a decision on *Environmental Defense Fund v. EPA*, 167 F.3d 641 (D.C. Cir. 1999), that we must make an affirmative determination that motor vehicle emission budgets in submitted SIPs are adequate before transportation agencies can use those budgets in conformity determinations under the transportation conformity rule set forth in 40 CFR 93, subpart A.

Upon receipt of the 2000 CO plan, we announced receipt of the plan on the Internet and requested public comment by September 29, 2000. The November 20, 2000 letter from Amy Zimpfer to Allen Biaggi and the November 30, 2000 Federal Register Notice (65 FR 71313) announced our decision that the motor vehicle budgets in the CO Plan are adequate. The technical support document that was attached to the letter summarizes how the motor vehicle CO emission budgets for the

years 2000, 2010 and 2020 meet the adequacy criteria contained in the conformity rule (40 CFR 93.118(e)(4)). These budgets are shown in Table 7.

Table 7 - Las Vegas Valley Peak Season Emission Budgets

Source Category	Emissions (tons/day)		
	2000	2010	2020
On-road Motor Vehicles....	310.2	329.5	457.4

Source: 2000 CO Plan, Table 8-3.

The 2000 CO plan predicts that the overall downward CO emissions trend in the nonattainment area will reverse after year 2000 and will, before 2020, exceed valley-wide CO emissions estimated for 1996 (i.e., 479.1 tons per day) when CO NAAQS violations were recorded; however, the results of area-wide and hot-spot modeling provided in the 2000 CO plan indicate that CO NAAQS violations would not be expected in the future despite these increases in overall CO emissions. The explanation lies in the wider geographic distribution of traffic and related CO emissions in 2020 compared to conditions that prevailed in the mid-1990's due to land use development patterns that disperse new development and related traffic congestion into outlying areas. Thus, the CO motor vehicle emission budgets in the 2000 CO plan can be approved

despite the increases relative to emissions levels associated with past NAAQS violations.

We re-affirm the evaluation provided in the TSD supporting the adequacy determination and propose to approve the CO motor vehicle emission budgets (shown in Table 7, above) contained in the 2000 CO plan as meeting the purposes of section 176(c)(1) and the transportation conformity rule at 40 CFR 93, subpart A.

L. Summary of EPA's proposed actions

Under section 110(k)(3) of the Act, we propose the following actions on elements of the 1995 CO plan, the vehicle I/M program for Las Vegas Valley, and the 2000 CO plan.

- (1) Approval of procedural requirements, under section 110(a)(1) of the Act;
- (2) Approval of baseline and projected emission inventories, under sections 172(c)(3) and 187(a)(1) of the Act and approval of reasonable further progress, under sections 172(c)(2) and 187(a)(7) of the Act;
- (3) Approval of attainment demonstration, under section 187(a)(7) of the Act;
- (4) Approval of revisions to the Nevada vehicle I/M program for Las Vegas Valley and Boulder City under section 187(a)(6) of the Act. Specifically, we propose to

approve the statutory and regulatory basis for the revised program in NRS, title 40, section 445B.210 and sections 445B.700 through 445B.845, and title 43, sections 481.047-481.083, 482.155-482.283, 482.385, 482.461, 482.565, and 484.644-484.6441, as amended by Nevada through 2001, and NAC sections 445B.400 through 445B.735 (not including 445B.576, 445B.577, 445B.578), as amended through March 8, 2002 by SEC and DMV, and, in the case of draft revisions to NAC 445B.580, as submitted by NDEP by letter dated January 30, 2002. We will consider final action on the vehicle I/M program once we receive the final adopted version of NAC 445B.580 (and other NAC sections that specify final test procedures and equipment used for OBD checks);

- (5) Approval of the State's low RVP wintertime requirement for gasoline sold in Clark County. Specifically, we propose to approve NAC 590.065 as adopted on October 28, 1998 by the State Board of Agriculture;
- (6) Approval of the County's wintertime Cleaner Burning Gasoline (CBG) regulation under section 211(c)(4)(C) of the Act. Specifically, we propose to approve CCDAQM section 54 as adopted on July 24, 2001 by CCAQMB based on the condition that the State submit to EPA the CCAQMB

version of the rule prior to our taking final action.

CCAQMB's adopted version of the CBG rule (CCDAQM section 54) is the same as the Board of Health's CBG regulation that had been submitted to EPA in August 2000 as one of the principal control measures in the 2000 CO plan developed to meet the applicable requirements under part D of title I of the Act for the Las Vegas CO nonattainment area but for changes in the references to the applicable agency;

- (7) Approval of RTC's CAT MATCH commuter incentive program under section 187(b)(2) of the Act and our voluntary mobile source emissions reduction program policy.

Specifically, we propose to approve CAT MATCH guidelines as set forth in RTC's Resolution No. 177, adopted on June 10, 1999, and the commitments to implement and monitor the program, and prepare annual reports, as set forth in RTC's Resolution No. 186, adopted on June 8, 2000;

- (8) Approval of the Alternative Fuels Program for government vehicles in Clark County. Specifically, we propose to approve the regulations set forth in NAC Chapter 486A, as amended through April 20, 2000 by the State Environmental Commission;

- (9) Approval of a determination that stationary sources do

not contribute significantly to ambient CO levels in the Las Vegas CO nonattainment area for the purposes of section 187(c) of the Act;

- (10) Approval of VMT forecasts and the responsible agencies' commitments to revise and replace the VMT projections as needed and monitor actual VMT levels in the future, under section 187(a)(2)(A) of the Act. Specifically, we propose to approve RTC's commitments to prepare VMT estimates, forecasts, and annual VMT tracking reports as set forth in Resolution No. 149, as adopted on July 13, 1995;

- (11) Approval of contingency measures under section 187(a)(3) of the Act. Specifically, we propose to approve the revisions to NAC 445B.580 related to implementation of OBD testing based on the draft revisions to that section submitted by NDEP under letter dated January 30, 2002 and the commitments contained in Resolution of the Clark County Board of Commissioners to Adopt the Las Vegas Valley Carbon Monoxide State Implementation Plan, adopted August 1, 2000, to monitor the emission reductions associated with the plan's control measures, to remedy in a timely fashion any shortfall, to prepare and submit a plan revision to EPA that quantifies the actual benefits

of the contingency measures contained in the plan, within one year of the release date of pending applicable guidance protocols and models, and to the resolution adopted by the Nevada State Environmental Commission on April 9, 1999;

(12) Disapproval of the other two contingency measures contained in the 2000 CO plan, lower I/M program cutpoints and on-road remote sensing, but our disapproval, if finalized, would not trigger sanctions clocks because we are proposing to find that OBD II testing and related commitments themselves provide the necessary compliance with section 187(a)(3) of the Act; and

(13) Approval of the CO motor vehicle emissions budgets for 2000, 2010, and 2020 as meeting the purposes of section 176(c)(1) and the transportation conformity rule at 40 CFR 93, subpart A. All future transportation conformity determinations for CO in Clark County must be based on the CO Complex model with MOBILE5b until the grace period for MOBILE6 has concluded.

III. Request for Public Comment

We are soliciting public comment on all aspects of this proposal. These comments will be considered before taking

final action. To comment on today's proposal, you should submit comments by mail or in person (in triplicate if possible) to the ADDRESSES section listed in the front of this document. Your comments must be received by [insert date 30 days after the publication date] to be considered in the final action taken by EPA.

IV. Administrative Requirements

A. Executive Order 12866

The Office of Management and Budget (OMB) has exempted this regulatory action from Executive Order 12866, entitled "Regulatory Planning and Review."

B. Executive Order 13045

Executive Order 13045, entitled Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997), applies to any rule that: (1) Is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible

alternatives considered by the Agency. This proposed rule is not subject to Executive Order 13045 because it does not involve decisions intended to mitigate environmental health or safety risks.

C. Executive Order 13132

Executive Order 13132, entitled Federalism (64 FR 43255, August 10, 1999) revokes and replaces Executive Orders 12612, Federalism, and 12875, Enhancing the Intergovernmental Partnership. Executive Order 13132 requires EPA to develop an accountable process to ensure "meaningful and timely input by state and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government." Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by state and local governments, or EPA consults with state and local

officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts state law unless the Agency consults with state and local officials early in the process of developing the proposed regulation.

This rule will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132, because it merely proposes to approve a state plan implementing a federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. Thus, the requirements of section 6 of the Executive Order do not apply to this rule.

D. Executive Order 13175

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." This proposed rule does not have tribal implications. It will not have substantial direct effects on

tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. This action does not involve or impose any requirements that affect Indian Tribes. Thus, Executive Order 13175 does not apply to this rule.

E. Executive Order 13211

This proposed rule is not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

F. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions. This proposed rule will not have a significant impact on a substantial number of small entities because SIP approvals

under section 110 and subchapter I, part D of the Clean Air Act do not create any new requirements but simply approve requirements that the state is already imposing. Therefore, because the Federal SIP approval does not create any new requirements, I certify that this action will not have a significant economic impact on a substantial number of small entities. Moreover, due to the nature of the Federal-State relationship under the Clean Air Act, preparation of flexibility analysis would constitute Federal inquiry into the economic reasonableness of state action. The Clean Air Act forbids EPA to base its actions concerning SIPs on such grounds. *Union Electric Co., v. U.S. EPA*, 427 U.S. 246, 255-66 (1976); 42 U.S.C. 7410(a)(2).

G. Unfunded Mandates

Under Section 202 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act"), signed into law on March 22, 1995, EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated annual costs to state, local, or tribal governments in the aggregate; or to the private sector, of \$100 million or more. Under Section 205, EPA must select the most cost-effective and least burdensome alternative that achieves the objectives of the rule and is

consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule. EPA has determined that the proposed approval action does not include a Federal mandate that may result in estimated annual costs of \$100 million or more to either state, local, or tribal governments in the aggregate, or to the private sector. This Federal action proposes to approve pre-existing requirements under state or local law, and imposes no new requirements. Accordingly, no additional costs to state, local, or tribal governments, or to the private sector, result from this action.

H. National Technology Transfer and Advancement Act

Section 12 of the National Technology Transfer and Advancement Act (NTTAA) of 1995 requires Federal agencies to evaluate existing technical standards when developing a new regulation. To comply with NTTAA, EPA must consider and use "voluntary consensus standards" (VCS) if available and applicable when developing programs and policies unless doing so would be inconsistent with applicable law or otherwise impractical. EPA believes that VCS are inapplicable to this action. Today's action does not require the public to perform activities conducive to the use of VCS.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Intergovernmental regulations, Reporting and recordkeeping requirements.

Authority: 42 U.S.C. 7401 et seq.

Date

Wayne Nastri
Regional Administrator,
Region 9

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